

OVER-BARRIER DECAY OF A MIXED STATE
IN 2D MULTIWELL POTENTIALS

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S u m m a r y

The classical escape in 2D Hamiltonian systems with a mixed state has been studied numerically and analytically. The wide class of potentials with a mixed state is presented by polynomial potentials. In potentials, where the mixed state could be realized, i.e. the configuration space contains regions of both regular and chaotic motions, the escape problem has a number of new features. In particular, some local minima become a trap with the number of particles depending on the energy and other values that characterize the ensemble of particles. Choosing a form of the initial ensemble, one chooses the set of parameters that determine the number of trapped particles.